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## REFERENCES

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## Sequence

Q

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KW

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DE

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Id

OR

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PT beans and produced in large quantities using yeast and bacterial  
 PT expression vectors.  
 PS Claim 4: Fig 2: 59pp; English.  
 CC The inventors claim a 67 kd and 31 kd T. cacao protein, and  
 CC fragments, and encoding DNAs. The 47 kd and 31 kd proteins are  
 CC derived from the 67 kd precursor. T. cacao protein cDNA was  
 CC detected in a cDNA library prepared from immature cocoa beans RNA  
 CC using a probe based on the AA sequence of a CNR peptide common to  
 CC the 47 kd and 31 kd polypeptides. Homology searches revealed close  
 CC homologies between the 67 kd polypeptide and the vicilins, which are  
 CC seed storage proteins.  
 SQ Sequence 566 AA;

Query Match 100.0%; Score 361; DB 1; Length 566;  
 Best Local Similarity 100.0%; Pred. No. 1.51e-24;  
 Matches 47; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 34 YERDPQOYECCQRCSEATEEREOECQRCERERKQROQEE 80  
 QY 34 YERDPQOYECCQRCSEATEEREOECQRCERERKQROQEE 80

RESULT 3  
 ID W62830 standard; Protein: 625 AA.  
 AC W62830.  
 DT 27-OCT-1998 (first entry)  
 DE Macadamia integrifolia antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 OS Macadamia integrifolia.  
 FH Key Location/Qualifiers  
 FT Peptide 1..28  
 FT /note= "signal peptide"  
 FT Protein 29..666  
 FT /note= "mature protein"  
 PN W09827805-A1.  
 PD 02-JUL-1998.  
 PF 22-DEC-1997; AU0874.  
 PR 20-DEC-1996; AU-004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
 DR WPI: 98-377279/32.  
 DR N-PSDB: V42316.  
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
 PT useful for controlling microbial infestations of plants or mammals  
 PS Claim 1: Page 43-45; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can  
 CC be used to control microbial infestations in plants and mammalian  
 CC animals.  
 SQ Sequence 625 AA;

Query Match 59.8%; Score 216; DB 1; Length 625;  
 Best Local Similarity 59.1%; Pred. No. 3.59e-11;  
 Matches 26; Conservative 8; Mismatches 9; Indels 1; Gaps 1;

Db 78 QRDPOQOYECCQRCSEATEEREOECQRCERERKQROQ 121  
 QY 35 ERDPQOYECCQRCSEATEEREOECQRCERERKQROQ 77

RESULT 4  
 ID W62829 standard; Protein: 666 AA.  
 AC W62829.  
 DT 27-OCT-1998 (first entry)  
 DE Macadamia integrifolia antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 OS Macadamia integrifolia.  
 FH Key Location/Qualifiers  
 FT Peptide 1..28  
 FT /note= "signal peptide"  
 FT Protein 29..666  
 FT PN W09827805-A1.  
 PD 02-JUL-1998.  
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;

PF 22-DEC-1997; AU0874.  
 PR 20-DEC-1996; AU-004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
 DR WPI: 98-377279/32.  
 DR N-PSDB: V42311.  
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
 PT useful for controlling microbial infestations of plants or mammals  
 PS Claim 1: Page 39-41; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can  
 CC be used to control microbial infestations in plants and mammalian  
 CC animals.  
 SQ Sequence 666 AA;

Query Match 59.3%; Score 214; DB 1; Length 666;  
 Best Local Similarity 59.1%; Pred. No. 5.45e-11;  
 Matches 26; Conservative 7; Mismatches 10; Indels 1; Gaps 1;

Db 119 QRDPOQOYECCQRCSEATEEREOECQRCERERKQROQ 162  
 QY 35 ERDPQOYECCQRCSEATEEREOECQRCERERKQROQ 77

RESULT 5  
 ID W62828 standard; Protein: 666 AA.  
 AC W62828.  
 DT 27-OCT-1998 (first entry)  
 DE Macadamia integrifolia antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 OS Macadamia integrifolia.  
 FH Key Location/Qualifiers  
 FT Peptide 1..28  
 FT /note= "signal peptide"  
 FT Protein 29..666  
 FT /note= "mature protein"  
 PN W09827805-A1.  
 PD 02-JUL-1998.  
 PF 22-DEC-1997; AU0874.  
 PR 20-DEC-1996; AU-004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
 DR WPI: 98-377279/32.  
 DR N-PSDB: V42310.  
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
 PT useful for controlling microbial infestations of plants or mammals  
 PS Claim 1: Page 34-36; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can  
 CC be used to control microbial infestations in plants and mammalian  
 CC animals.  
 SQ Sequence 666 AA;

Query Match 58.4%; Score 211; DB 1; Length 666;  
 Best Local Similarity 56.8%; Pred. No. 1.02e-10;  
 Matches 25; Conservative 9; Mismatches 9; Indels 1; Gaps 1;

Db 119 QRDPOQOYECCQRCSEATEEREOECQRCERERKQROQ 162  
 QY 35 ERDPQOYECCQRCSEATEEREOECQRCERERKQROQ 77

RESULT 6  
 ID W62832 standard; Protein: 590 AA.  
 AC W62832.  
 DT 27-OCT-1998 (first entry)  
 DE Gossypium hirsutum antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 OS Gossypium hirsutum.  
 PN W09827805-A1.  
 PD 02-JUL-1998.  
 PF 22-DEC-1997; AU0874.  
 PR 20-DEC-1996; AU-004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;

DR WPI: 98-377279/32.  
PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
PT useful for controlling microbial infestations of plants or mammals  
PS Claim 1: Page 49-51: 96pp: English.  
CC The sequence is that of an antimicrobial protein which can  
CC be used to control microbial infestations in plants and mammalian  
CC animals.  
SQ Sequence 590 AA:  
Query Match 50.1%; Score 181; DB 1; Length 590;  
Best Local Similarity 44.2%; Pred. No. 4,93e-08;  
Matches 19; Conservative 13; Mismatches 11; Indels 0; Gaps 0;  
DB 34 DDDPKRYEDCRRRCRCEWPTRGKEDQOQCESSCKSQYGEKQDQ 76  
QY 35 ERDPKQYEQGQCRRCSEATEEREDQECGRCEKREYKQROQ 77  
RESULT 7  
ID W62841 standard; Protein: 28 AA.  
AC W62841:  
DE Stenocarpus sinuatus antimicrobial protein.  
KW antimicrobial protein; infestation; control.  
OS Stenocarpus sinuatus.  
PN W09827805-A1.  
PD 02-JUL-1998.  
PF 22-DEC-1997: AU0874.  
PR 20-DEC-1996: AU-004275.  
PI (RETR)-COOP RES CENT TROPICAL PLANT PATHOLOGY.  
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
DR WPI: 98-377279/32.  
PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
PT useful for controlling microbial infestations of plants or mammals  
PS Claim 1: Page 66: 96pp: English.  
CC The sequence is that of an antimicrobial protein which can  
CC be used to control microbial infestations in plants and mammalian  
CC animals.  
SQ Sequence 28 AA:  
Query Match 29.1%; Score 105; DB 1; Length 28;  
Best Local Similarity 48.1%; Pred. No. 1.72e-01;  
Matches 13; Conservative 6; Mismatches 6; Indels 2; Gaps 2;  
DB 2 DPIRQO-QLCQMRCCQOQEKDPKQOQOC 27  
QY 37 DP-RQYEQGQCRRCSEATEEREDQEC 62  
RESULT 8  
ID W52197 standard; Protein: 1311 AA.  
AC W52197:  
DE 25-JUN-1998 (first entry)  
KW Precis coenia (butterfly) patched (ptc) protein.  
KW Patched protein; ptc; cancer; tumour suppressor;  
KW wound healing; ageing; Precis coenia; butterfly.  
OS Precis coenia.  
PN W09745541-A2.  
PD 04-DEC-1997.  
PF 02-JUN-1997: U09553.  
PR 31-MAY-1996: US-656055.  
PA (RECC) UNIV CALIFORNIA.  
PA (STRD) UNIV LEILAND STANFORD JUNIOR.  
PI Epstein E, Goodrich LV, Johnson RL, Oro A, Scott MP;  
DR WPI: 98-032648/03.  
PT Patched protein other than Drosophila melanogaster patched protein -  
PT used for characterising the phenotype of a tumour  
PS Claim 2: Pages 52-55: 86pp: English.  
CC This is a Precis coenia (butterfly) patched (ptc) protein and the  
CC encoding DNA can be used to construct an expression cassette comprising  
CC an altered patch or hedgehog gene. The expression cassette comprises a  
CC nucleic acid encoding a patched protein other than a Drosophila  
CC melanogaster patched protein, or fragment of at least 12 nucleotides in

CC length, as other than an intact chromosome under transcriptional control  
CC of a transcriptional initiation region, and a transcriptional termination  
CC region, both functional in an expression host. A genetically engineered  
CC mammalian cell comprising this expression cassette as an extrachromosomal  
CC element or integrated into the genome of the cell can be predisposed to  
CC develop basal cell carcinoma as a result of the transfection. By  
CC analysing DNA, functional analysis of patched protein function, or by  
CC detecting antibody binding to abnormal patched protein, a genetic  
CC predisposition to developmental abnormalities and cancer can be  
CC diagnosed. This analysis can also be used for characterising the  
CC phenotype of a tumour, particularly a carcinoma, especially a basal cell  
CC carcinoma. The methods can also be used for characterising transional  
CC cell carcinoma of the bladder, meningiomas, medulloblastomas, etc. The  
CC modified cells comprising the expression cassette can be used to  
CC determine the role of different exons of the patched gene in oncogenesis,  
CC signal transduction, etc. Transgenic animal models created from these  
CC cells can be used as animal models for carcinomas of the skin. The  
CC patched protein of mosquito, butterfly or beetle or alternatively, a  
CC mammalian patched protein of human or mouse can be used to identify  
CC ligands or substrates that bind to, modulate, or mimic the action of  
CC patched gene. These agents could be used as tumour suppressors, cell  
CC adhesion promoters (e.g. in wound healing and ageing).  
SQ Sequence 1311 AA:  
Query Match 27.1%; Score 98; DB 1; Length 1311;  
Best Local Similarity 21.7%; Pred. No. 6.40e-01;  
Matches 10; Conservative 21; Mismatches 13; Indels 2; Gaps 2;  
DB 1234 DRKSRSHYHYDRDRDRDRDRDRDRDRDR-DND-RDRDRDRDRD 1277  
QY 35 ERDPKQYEQGQCRRCSEATEEREDQECGRCEKREYKQROQEE 80  
RESULT 9  
ID W72971 standard; Protein: 1311 AA.  
AC W72971:  
DE 26-JAN-1999 (first entry)  
KW Precis coenia patched amino acid sequence.  
KW Patched gene; ptc; diagnosis; treatment; developmental disorder;  
KW cancer; healing; injured tissue; spina bifida; Wnt-1 oncogene;  
KW sperm production; gene therapy.  
OS Precis coenia.  
PN Key Location/Qualifiers  
FT MISC.difference 348 /note= "unspecified"  
FT MISC.difference 908 /note= "unspecified"  
FT MISC.difference 908 /note= "unspecified"  
PN US5837538-A.  
PD 17-NOV-1998.  
PF 06-OCT-1995: 540406. +  
PR 06-OCT-1995: US-540406.  
PR 07-OCT-1994: US-319745.  
PA (STRD) UNIV LEILAND STANFORD JUNIOR.  
PI Goodrich LV, Johnson RL, Scott MP;  
DR WPI: 99-023461/02.  
PT Nucleic acid encoding vertebrate patched protein and related  
PT transformants - used to express poly(peptide)s, useful for  
PT diagnosis and treatment of developmental disorders or cancer, and in  
PT healing of injured tissue  
PS Example; Column 25-32: 38pp: English.  
CC The present invention describes vertebrate and invertebrate patched (ptc)  
CC genes. Cells containing and expressing the ptc gene are used for the  
CC recombinant production of the protein. These in turn are useful: (i) for  
CC generating antibodies (Ab); and (ii) to screen for specific-binding  
CC ligands (potential therapeutic agonists and antagonists). The ptc gene,  
CC or its fragments, are used to isolate related sequences from other  
CC mammals; to identify mutations (particularly those associated with  
CC genetic diseases such as spina bifida and other developmental disorders);  
CC to monitor expression levels in testis (to determine relationship with  
CC sperm production) and to isolate 5'-non-coding sequences (used to study  
CC embryonic development and to provide regulated expression of proteins).  
CC The complete gene can be used in gene therapy, including expression of  
CC antisense molecules, and to generate transgenic animals for studies of





OY 42 YECCORCESEATEREEOCEOR-C 66

RESULT 15

ID R91712 standard; Protein: 181 AA.  
AC R91712.  
DT 17-NOV-1996 (first entry)  
DE AcANAP47.  
KW AcANAP; HONAP; NamAP; AcenAP; ADUNAP; anticoagulant;  
KW nematode-extracted anticoagulant protein; serine protease;  
KW nematode; thrombosis; parasitic worm.  
OS Ancylostoma caninum.  
PN WO9612021-A2.  
PD 25-APR-1996.  
PF 17-OCT-1995; U13231.  
PR 18-OCT-1994; US-326110.  
PR 05-JUN-1995; US-486389.  
PR 05-JUN-1995; US-461965.  
PR 05-JUN-1995; US-486397.  
PR 05-JUN-1995; US-465380.  
PA (CORV-) CORVAS INT INC.  
PI Bergum PM, Ganssems VGT, Jespers LS, Laroche YR;  
PI Lauwereys MJ, Messens JH, Moyle W, Stanssens PEH;  
PI Vlaux GP;  
DR MPI; 96-222007/22.  
DR N-PSDB; T12958.  
PT Proteins with anticoagulant and/or serine protease inhibitory  
PT activity - isolated from nematodes and useful to inhibit blood  
PT coagulation  
PS Claim 221; Fig 13G; 243pp; English.  
CC Proteins with anticoagulant and/or serine protease inhibitory  
CC activity, isolated from nematodes, are useful to inhibit blood  
CC coagulation. The proteins can be added to blood collection tubes  
CC defining the collection of mammalian plasma. They are also useful  
CC to prevent or inhibit thrombosis, and may be given alone or in  
CC combination with other therapeutic or in vivo diagnostic agents.  
CC The proteins can serve as immunogens to raise antibodies for use in  
CC the diagnosis and identification of NAP concn. levels in biological  
CC fluids, e.g. to detect mammalian infection with a parasitic worm.  
CC They can also be used as immunogens in prophylactic and therapeutic  
CC vaccines against parasitic worm infection. The proteins may  
CC double the clotting time of human plasma in prothrombin time assays  
CC when present at 10-50 nMol, and double the clotting time of human  
CC plasma in activated partial thrombin time assays when present  
CC at 10-100 nMol.  
CC The anticoagulant proteins are pref. derived from  
CC Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator  
CC americanus or Heligmosomoides polygyrus.  
CC The proteins pref. have 2 NAP domains and specifically inhibit  
CC the catalytic activity of the factor VIIa/TF complex in the  
CC presence of factor Xa or a catalytically inactive factor Xa deriv.,  
CC do not specifically inhibit the activation of factor VIIa in the  
CC absence of TF and do not specifically inhibit prothrombinase.  
SQ Sequence 181 AA:

Query Match 25.2%; Score 91; DB 1; Length 181;  
Best Local Similarity 46.2%; Pred. No. 2.34e+00;  
Matches 12; Conservative 5; Mismatches 7; Indels 2; Gaps 2;  
DB 118 YKCEKRC-SELSKNEPACLSRAC 142  
OY 42 YECCORCESEATEREEOCEOR-C 66

Search completed: Sat May 13 10:39:28 2000  
Job time : 8 secs.